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| APPLICATION NO.          | FILING DATE                       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. CONFIRMATION NO |              |  |
|--------------------------|-----------------------------------|----------------------|-------------------------------------|--------------|--|
| 10/614,957               | . 07/08/2003                      | So-Hyun Kim          | 678-965 (P10330)                    | 7135         |  |
| 28249<br>DII WORTH &     | 7590 01/31/2007<br>& BARRESE, LLP | EXAMINER             |                                     |              |  |
| 333 EARLE OVINGTON BLVD. |                                   |                      | MILLER, BRANDON J                   |              |  |
| SUITE 702<br>UNIONDALE,  | NY 11553                          |                      | ART UNIT                            | PAPER NUMBER |  |
| 011101122,               | 3,111 11000                       |                      | 2617                                |              |  |
| CHORTENED STATISTOR      | RY PERIOD OF RESPONSE             | MAIL DATE            | DELIVER                             | V MODE       |  |
|                          | ONTHS                             | 01/31/2007           | PAPER '                             |              |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|   |   | Applica   | tion No.  | Applicant(s)  |   |  |  |  |
|---|---|---|---|---|---|--|--|--|
| Office Action Summary   |   |   | 957   | KIM, SO-HYUN  |   |  |  |  |
|   |   |   | er  | Art Unit  |   |  |  |  |
|   |   |   | J. Miller   | 2617  |   |  |  |  |
|   | The MAILING DATE of this communica  |   |   | <u>l</u>  | ; |  |  |  |
| Period for Reply  |   |   |   |   |   |  |  |  |
| WHIC<br>- Exter<br>after<br>- If NC<br>- Failu<br>Any   | ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAI resions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this community period for reply is specified above, the maximum statutive to reply within the set or extended period for reply will reply received by the Office later than three months after ed patent term adjustment. See 37 CFR 1.704(b). | LING DATE OF T<br>37 CFR 1.136(a). In no e<br>cation.<br>ory period will apply and<br>, by statute, cause the a | THIS COMMUNICATION event, however, may a reply be tin will expire SIX (6) MONTHS from pplication to become ABANDONE | N. nely filed the mailing date of this communi D (35 U.S.C. § 133). |   |  |  |  |
| Status  |   |   |   |   | , |  |  |  |
| 1)⊠   | Responsive to communication(s) filed  | on <i>08 July 2003</i> .  |   |   | • |  |  |  |
|   | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  |   |   |   |   |  |  |  |
| 3)[   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |   |   |   |  |  |  |
|   | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |   |   |   |   |  |  |  |
| Disposition of Claims   |   |   |   |   |   |  |  |  |
| 4)⊠   | Claim(s) 1-7 is/are pending in the appli  | cation.   |   |   | , |  |  |  |
| •   | 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |   |   |   |  |  |  |
|   | Claim(s) is/are allowed.  |   |   |   |   |  |  |  |
| ·   | Claim(s) <u>1-7</u> is/are rejected.  |   |   |   | • |  |  |  |
| 7)  | Claim(s) is/are objected to.  |   |   |   | • |  |  |  |
| 8)[   | Claim(s) are subject to restriction   | n and/or election   | requirement.  |   |   |  |  |  |
| Applicati   | on Papers   |   |   |   |   |  |  |  |
|   | The specification is objected to by the E   | Evaminar  |   |   |   |  |  |  |
| ·   | •   |   | ented or h) objected  | to by the Evaminer  |   |  |  |  |
| . 10/23   | 10)⊠ The drawing(s) filed on <u>28 August 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |   |   |   |  |  |  |
|   | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |   |   |   |   |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.                  |   |   |   |   |   |  |  |  |
| Priority u  | ınder 35 U.S.C. § 119   | :   |   | -   |   |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).                              |   |   |   |   |   |  |  |  |
| a)  All b) Some * c) None of:   |   |   |   |   |   |  |  |  |
| ,-  | 1.⊠ Certified copies of the priority documents have been received.  |   |   |   |   |  |  |  |
|   | 2. Certified copies of the priority documents have been received in Application No  |   |   |   |   |  |  |  |
|   | 3. Copies of the certified copies of the priority documents have been received in this National Stage   |   |   |   |   |  |  |  |
|   | application from the Internationa   | l Bureau (PCT Ru  | ule 17.2(a)).   |   |   |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.                                    |   |   |   |   |   |  |  |  |
|   |   |   |   |   |   |  |  |  |
|   |   |   | •   |   |   |  |  |  |
| Attachmen   | t(s)  |   |   |   |   |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)   |   |   |   |   |   |  |  |  |
| 2) Notic  | e of Draftsperson's Patent Drawing Review (PTO  | 9-948)  | Paper No(s)/Mail Da   | ate   |   |  |  |  |
| 3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application 6) Other: |   |   |   |   |   |  |  |  |

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### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Herrmann et al. (US 7,050,415 B2).

Regarding claim 1 Herrmann teaches a method of setting a transport format combination (TFC) in a broadband code division multiple access (CDMA) communication system (see col. 1, lines 26-29 and col. 2, lines 59-61). Herrmann teaches transmitting from a radio resource control (RRC) layer transport format set (TFS) information and transport format combination set (TFCS) information during a channel initialization for data transmission among respective layers of the broadband CDMA communication system (see col. 4 lines 1-20 and col. 5, lines 45-48). Herrmann teaches selecting at a medium access control (MAC) layer an initial TFC by preferentially allocating a maximum packet data unit (PDU) value to a transmission channel on which a logic channel having a relatively high priority among a plurality of transmission channels has been mapped, the allocating achieved by analyzing the received TFS information and the TFCS information (see col. 5, lines 16-19 & 43-55 and col. 6, lines 41-48). Herrmann teaches transmitting from the MAC layer to a radio link control (RLC) layer the initial PDU

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value including respective logic channels by allocating an initial PDU value according to the initial TFC to the respective logic channels (see col. 4, lines 54-66 and col. 5, lines 43-52).

Herrmann teaches receiving at the RLC layer an initial PDU value, and setting the initial PDU value as a final PDU value (see col. 7, lines 42-47).

Regarding claim 2 Herrmann teaches determining at the MAC layer a mapping status of the logic channels for the respective transmission channels, and determining a priority of the respective logic channels (see col. 5, lines 16-28). Herrmann teaches selecting among the TFCS the TFC that allocates the maximum PDU value to the transmission channel on which the logic channel having the highest priority is mapped (see col. 5, lines 43-56). Herrmann teaches reselecting among selected TFCs the TFC that allocates the maximum PDU value to the transmission channel on which the logic channel having the next-to-highest priority is mapped if a plurality of TFCs are selected (see col. 5, lines 56-60). Herrmann teaches repeating a step until one of the TFCs is selected, and if one of the TFCs is selected, setting the TFC as the initial TFC (see col. 5, lines 61-67 and col. 6, lines 1-3 & 41-48).

Regarding claim 3 Herrmann teaches allocating at the MAC layer the initial PDU value according to the initial TFC to the corresponding transmission channel (see col. 4, lines 54-64). Herrmann teaches allocating the allocated initial PDU value to the logic channel having the highest priority among the logic channels mapped on the respective transmission channel and transmitting the initial PDU value allocated to the logic channel to the RLC layer including the logic channel (see col. 5, lines 43-53).

Regarding claim 4 Herrmann teaches comparing at the RLC layer the received initial PDU value and a maximum transmission amount of a transmission buffer provided in the RLC

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layer, and if the initial PDU value is larger than the maximum transmission amount, the RLC layer sets the maximum transmission value as the final PDU value, while if the initial PDU is smaller than the maximum transmission amount, it sets the initial PDU value as the final PDU value (see col. 4, lines 55-64 and col. 7, lines 28-46).

Regarding claim 5 Herrmann teaches receiving at the RLC layer the initial PDU value transmitted to the MAC layer where the initial transmission data is generated along with buffer occupancy information of a transmission buffer by dividing or combining the initial transmission data according to the set final PDU value during the generation of the initial transmission data; and setting the received initial PDU value as the final PDU value (see col. 4, lines 55-64 and col. 7, lines 42-46).

Regarding claim 6 Herrmann teaches a method of setting a transport format combination (TFC) in a broadband code division multiple access (CDMA) communication system (see col. 1, lines 26-29 and col. 2, lines 59-61). Herrmann teaches transmitting from a radio resource control (RRC) layer transport format set (TFS) information and transport format combination set (TFCS) information during a channel initialization for data transmission among respective layers of the broadband CDMA communication system (see col. 4 lines 1-20 and col. 5, lines 45-48). Herrmann teaches selecting at a medium access control (MAC) layer an initial TFC using the received TFS information and the TFCS information, allocating the initial PDU value according to the initial TFC to the logic channels mapped on the corresponding transmission channel (see col. 5, lines 16-19 & 43-55 and col. 6, lines 41-48). Herrmann teaches transmitting the initial PDU value to a radio link control (RLC) layer including the respective logic channels (see col. 4, lines 54-66 and col. 5, lines 43-52).

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Regarding claim 7 Herrmann teaches a method of setting a transport format combination (TFC) in a broadband code division multiple access (CDMA) communication system (see col. 1, lines 26-29 and col. 2, lines 59-61). Herrmann teaches receiving at a medium access control (MAC) layer transport format set (TFS) information and transport format combination set (TFCS) information from a radio resource control (RRC) layer during a channel initialization for data transmission among respective layers of the broadband CDMA communication system (see col. 4 lines 1-20 and col. 5, lines 45-48). Herrmann teaches selecting an initial TFC by analyzing the received TFS information and the TFCS information, and preferentially allocating a maximum packet data unit (PDU) value to a transmission channel on which a logic channel having a relatively high priority among a plurality of transmission channels has been mapped, allocating the initial PDU value according to the initial TFC to the logic channels mapped on the corresponding transmission channel (see col. 5, lines 16-19 & 43-55 and col. 6, lines 41-48). Herrmann teaches transmitting the initial PDU value to a radio link control (RLC) layer including the respective logic channels (see col. 4, lines 54-66 and col. 5, lines 43-52).

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 6-7 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the initial PDU value" in line 12 and line 15. There is insufficient antecedent basis for this limitation in the claim.

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Claim 6 recites the limitation "the initial PDU value" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the initial PDU value" in line 10 and line 12. There is insufficient antecedent basis for this limitation in the claim.

The above art rejection is based on the best possible interpretation of the claim language described in the rejection under 35. U.S.C. 112, second paragraph.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chi et al. Pub. No.: US 2003/0203736 A1 discloses a method for supporting traffics with different quality of service by high speed down link packet access system.

Choi et al. Pub. No.: US 2006/0062193 A1 discloses a medium access control unit.

Terry Pub. No.: US 2006/0268821 A1 discloses a MAC multiplexing and TFC selection procedure for enhanced uplink.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Miller whose telephone number is 571-272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 26, 2007

SUPERVISORY PATENT EXAMINER